

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for transporting a substrate plate efficiently, for positioning the substrate plate to enable to minimize mechanical motions and generation of vibration associated with conventional substrate positioning, and for holding the substrate. For example, the present exposure apparatus has a plurality of electrodes arranged along the baseplate and a transport apparatus having a control apparatus to impress a voltage on each electrode to first generate static charges in the substrate plate, then to impress a voltage on each of the plurality of electrodes so that the charge code of the electrodes is the same as the charge code of the substrate plate, and to switch the voltage on the electrodes in accordance with the time interval required to produce dielectric polarization in the substrate plate. The substrate plate can be transported by electrostatic forces at high speed without contacting the baseplate.